UNDP Kyrgyzstan is conducting the rapid research with a human-centric approach to screenshot the changing narratives of STEM women in the post-COVID 19 time

UNDP is conducting a needs assessment research consisting of

🔊 the public opinion survey,

💬 in-depth interviews,

👥 stakeholders' mapping

💡 a design thinking workshop

that generate a wide range of quantitative and qualitative data on STEM women in Kyrgyzstan.

It is a three-month rapid research with the focus on STEM communities in Bishkek and Osh.

Bishkek

Osh

STEM Supply

STEM Education

Informal education etc.
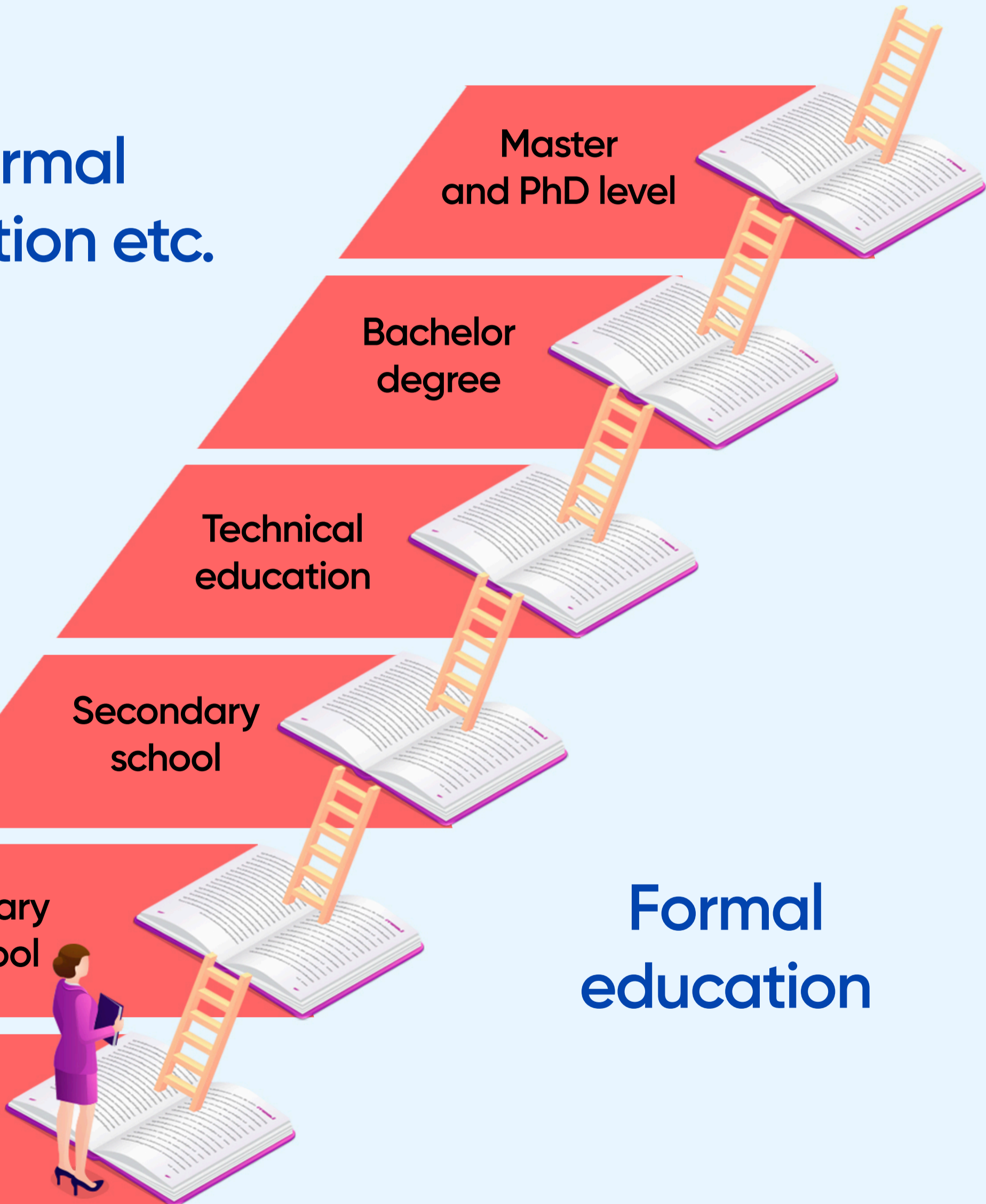
Formal education

Master and PhD level

Bachelor degree

Technical education

Secondary school

Primary school

Pre-school

Contextual factors and self-efficacy

Individual's aspiration, motivation and self-efficacy and confidence

Influence of peers and outside the classroom groups

Family influences and expectations

Sense of Belonging in the STEM Culture

STEM Demand

Biology and medicine occupations (biochemistry, biophysics, geology specialists etc.)

Engineering occupations (biomedical, mechanical, chemical engineers, robotics etc.)

Computer and information technology occupations (programmer, software or hardware engineer, security analyst, software/web/app developer etc.)

Mathematic occupation (actuary, mathematician, statistician, applied mathematics, data analyst etc.)
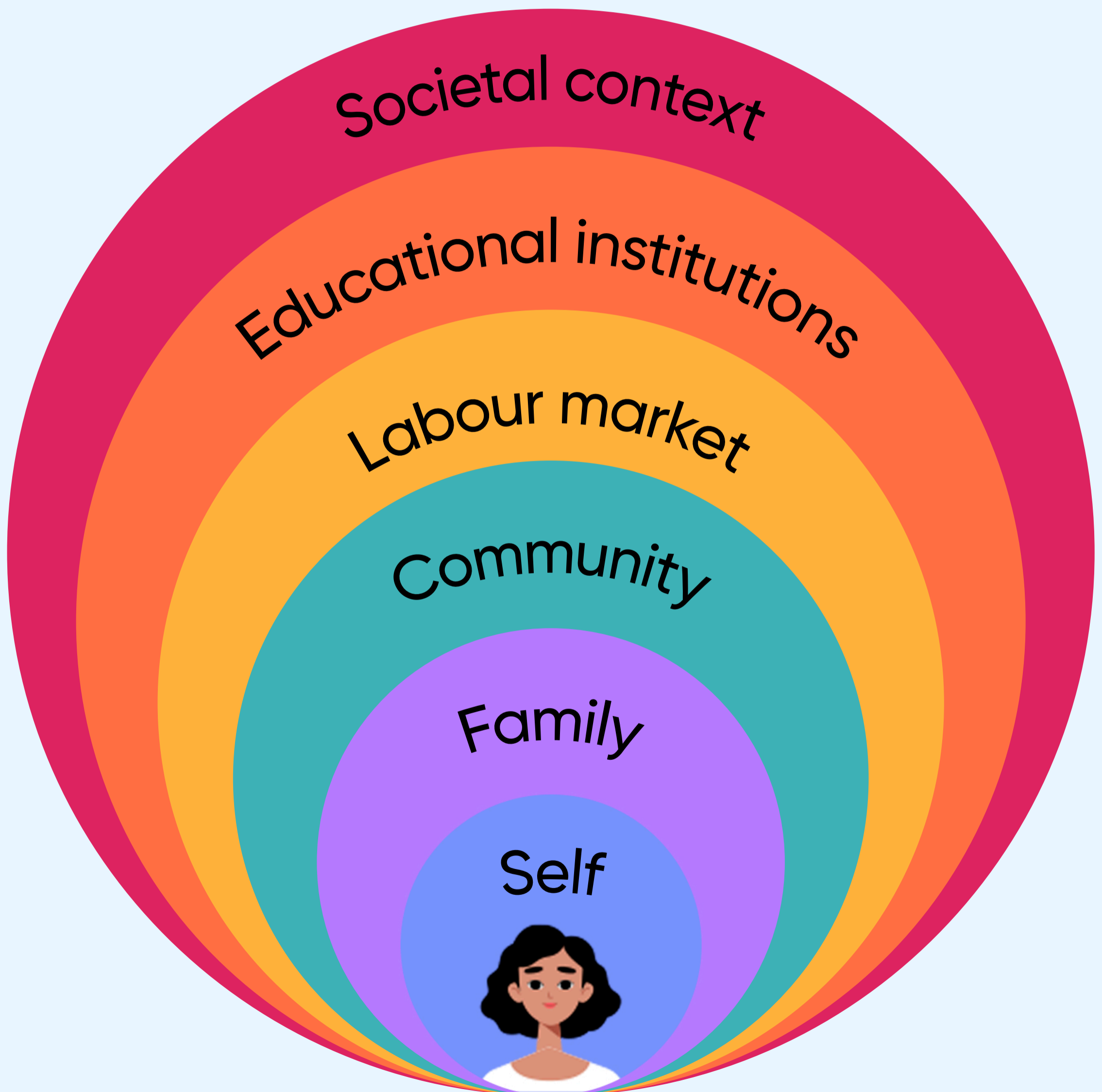
STEM Education-Related Occupations (STEM education specialist, curriculum developer, or researcher, research and academia)

Other STEM and STEM-Related Occupations (wind and solar energy, Chemist, Biochemist, Physicist/Astronomer, Nuclear technician, Financial analyst, Underwater archaeologist etc.)

Ecosystem of STEM women

Societal context

Educational institutions

Labour market

Community

Family

Self

Public opinion survey among women and men in both STEM and non-STEM fields in Kyrgyzstan

Who influences your career and employment decisions and plans the most (please select all relevant options)?

	Statement	Women		Men	
		STEM	non-STEM	STEM	non-STEM
1	Parents	46.5%	38%	42.9%	20.9%
2	Other	44%	20%	14.3%	23.3%
3	School/University teachers	9%	14%	14.3%	7%
4	Extracurricular activities: clubs, courses, tutorine	8.9%	28%	14.3%	14%
5	Peers and friends	8.9%	14%	14%	18.6%
6	Class/group mates	4%	16%	14%	25.6%
7	Role-model/famous people that I follow on social	3%	20%	0%	9.3%
8	Religious leaders	3%	10%	0%	9.3%
9	Government and its institutions	1%	4%	0%	9.3%
10	Do not want to answer	4%	6%	14.3%	18.6%

In your opinion, how do people in the country perceive girls and women who pursue careers and education that require strong knowledge in mathematics, physics, chemistry, engineering, and information technology?

	Statement	Women		Men	
		STEM	non-STEM	STEM	non-STEM
1	I think that nobody cares, as this is down to women/girls themselves to choose what they will do with their lives	51.5%	52%	57.1%	62.8%
2	I think they are admired with, as they are strong and independent women/girls	31.7%	32%	14.3%	16.3%
3	I think they are looked down at, as this is not normal or not widely accepted in society as these subjects are not for women	9.9%	6%	0%	14%
4	Do not know / Prefer not to answer	1%	6%	14.3%	4.7%
5	Other	5.9%	4%	14.3%	2.3%

In your opinion, what prevents women/girls from building a career in the fields that require strong skills in Mathematics, Physics, Information, Technology, Engineering and Chemistry?

	Statement	Women		Men	
		STEM	non-STEM	STEM	non-STEM
1	I do not see any barriers at all	66.3%	32%	57.1%	37.2%
2	I think that boys get more support and encouragement from parents/teachers on these subjects than girls	15.8%	12%	0%	9.3%
3	I think that men intellectually superior to women in these subjects	10.9%	30%	14.3%	23.3%
4	I think that schools do not provide enough support to girls to advance in STEM subjects	8.9%	18%	14.3%	11.6%
5	I think that parents do not allow their daughters to pursue employment in these fields because they are male dominated fields	6.9%	24%	0%	23.3%
6	I believe these fields take too much of time and energe and will interfere to build a family	4%	6%	2%	0%
7	I think that these subjects/fields are difficult for women/girls	2%	14%	14.3%	20.9%
8	I think that females do not need hard jobs as earning money is their husband's responsibility	1%	0%	0%	9.3%
9	I think women are not capable to take leading positions in STEM	1%	0%	0%	2.3%
10	Other	2%	4%	14.3%	2.3%
11	Do not want to answer	3%	2%	0%	0%

To what extent do you agree or disagree with the following statements?

	Statement	Women		Men	
		STEM	non-STEM	STEM	non-STEM
1	More women/girls will enter STEM as we live in an open and democratic society, and things will improve naturally without the provision of any special support to women/girls.	85.2%	62%	71.5%	51.2%
2	Women's/girls' participation in STEM can improve when adequate support and encouragement for girls/women are provided	88.1%	84%	62.8%	57.2%
3	The situation of limited participation of women/girls in STEM will not change until radical reforms are implemented in society and in the education system	35.7%	54%	28.6%	46.5%
4	The situation of limited participation of women/girls in STEM will get worse as our society becomes more traditional	24.7%	46.%	28.6%	37.2%
5	There is no need to do anything regarding women's/girls' participation in STEM as the current situation is absolutely fine.	31.7%	36%	28.6%	27.9%

In your opinion, do you think the number of women/girls should be increased in IT, Physics, Chemistry, Engineering, and other natural/exact science-related employment?

Whether the number of women/girls should be increased in IT, Physics, Chemistry, Engineering, and other natural/exact science-related employment

	Women		Men	
	STEM	Non-STEM	STEM	Non-STEM
Don't know/Prefer not to answer	5.9%	12%	14.3%	27.9%
No	3%	4%	14.3%	7%
Yes	91.1%	84%	71.4%	65.1%

Legend:
- Yes (green)
- No (yellow)
- Don't know/Prefer not to answer (grey)